# Clinical Endocrinology

#### **Editors**

LESLEY H. REES D. T. BAIRD

Editorial Assistant

T. E. T. WEST

## Editorial Board

#### J. D. N. NABARRO Chairman

D. C. ANDERSON

P. H. BAYLIS C. BEARDWELL

P. E. BELCHETZ

C. G. D. BROOK R. V. BROOKS

C. R. W. EDWARDS

R. L. HIMSWORTH

H. S. JACOBS

D. R. LONDON

J. L. H. O'RIORDAN

P. H. SÖNKSEN

J. S. WOODHEAD

**VOLUME 14** 

Pages 1-650

BLACKWELL SCIENTIFIC PUBLICATIONS

OXFORD LONDON EDINBURGH BOSTON MELBOURNE

1981

### CONTENTS

## **VOLUME 14, NUMBER 1, JANUARY 1981**

MADELEINE R. MUNDAY, M. G. BRUSH and R. W. TAYLOR. Correlations between progesterone, oestradiol and aldosterone levels in the premenstrual syndrome S. CAMPO, S. MOTEAGUDO, G. NICOLAU, E. PELLIZZARI, A. BELGOROSKY, M. STIVEL and M. RIVAROLA. Testicular function in prepubertal male pseudohermaphrodi-	1
tism M. C. White, J. Sanderson, K. Mashiter and G. F. Joplin. Gonadotrophin levels	11
in women with Cushing's syndrome before and after treatment NICOLETTA SONINO, DIANE CHOW, LENORE S. LEVINE and MARIA I. NEW. Clinical	23
response to metyrapone as indicated by measurement of mineralocorticoids in normal children	31
A. GROSSMAN, P. J. A. MOULT, R. C. GAILLARD, G. DELITALA, W. D. TOFF, LESLEY H. REES and G. M. BESSER. The opioid control of LH and FSH release: effects of a	
met-enkephalin analogue and naloxone  N. E. SKAKKEBAEK, J. BANCROFT, D. W. DAVIDSON and PAMELA WARNER.  And a converse of the control of the	41
Androgen replacement with oral testosterone undecanoate in hypogonadal men: a double blind controlled study  P. WILMSHURST, R. MELSON and B. GOSTELOW. Orbital pseudotumour and lacrimal	49
involvement developing in a patient with Riedel's struma receiving steroids M. Riniker, M. Tièche, G. A. Lupi, P. Grob, H. Struder and H. Bürgi.	63
Prevalence of various degrees of hypothyroidism among patients of a general medical department  J. A. SMITH, T. J. X. MEE, D. J. PADWICK and E. G. SPOKES. Human post-mortem	69
pineal enzyme activity  J. ETIENNE-DECERF and R. J. WINAND. A sensitive technique for determination of	75
thyroid-stimulating immunoglobulin (TSI) in unfractionated serum M. P. Moore, R. Smith, R. A. Donald, E. A. Espiner and S. Stronach. The	83
effects of different dose regimes of D-SER(TBU) <sup>6</sup> -LHRH-EA <sup>10</sup> (HOE 766) in subjects with hypogonadotrophic hypogonadism	93
Rapid Communications J. L. H. Evers and R. Rolland. The gonadotrophin resistant ovary syndrome: a	
curable disease?  A. B. Atkinson, J. J. Brown, D. L. Davies, A. F. Lever and J. I. S. Robertson.	99
Combined captopril and spironolactone treatment in Conn's syndrome with renal impairment and refractory hypertension	105
Preparation of Papers	109
VOLUME 14, NUMBER 2, FEBRUARY 1981	
J. GEURTS, N. DEMEESTER-MIRKINE, D. GLINOER, T. PRIGOGINE, M. FERNANDEZ- DEVILLE and J. CORVILLAIN. Alterations in circulating thyroid hormone and	
thyroxine binding globulin in chronic alcoholism.  J. Faber, T. I. A. Sørensen, I. B. Lumholtz, H. C. Klein, C. Kirkegaard and M. Brazzana. Town Samuelands of TA. T. and	113
BLICKERT-TOFT. Serum levels of T4, T3, reverse T3, 3, 3'-diiodothyronine and 3',5'-diiodothyronine in obesity, before and after jejuno-ileal bypass	119

P. A. DAHLBERG, F. A. KARLSSON and G. LUNDOVIST. High serum gastrin levels in 125 thyrotoxic patients M. F. SCANLON, M. D. RODRIGUEZ-ARNAO, A. M. McGregor, D. Weightman, M. LEWIS, D. B. COOK, A. GOMEZ-PAN and R. HALL. Altered dopaminergic regulation of thyrotrophin release in patients with prolactinomas: comparison with other tests of hypothalamic-pituitary function 133 D. R. ILLINGWORTH, M. R. McCLUNG, W. E. CONNOR and P. ALAUPOVIC. Familial hypercholesterolaemia and primary hypothyroidism: coexistence of both disorders in a young woman with severe hypercholesterolaemia 145 JANICE HENDERSON and J. R. WALL. Failure of haemagglutination and immunofluorescence methods to detect serum orbital antibodies in patients with Graves' ophthalmopathy 153 S. Kronheim, M. C. Sheppard and J. Miller. A radioimmunoassay for neurotensin 159 S. VANNASAENG, S. PLOYBUTR, P. VISUTKUL, S. TANDHANAND, R. SUWANIK and 165 P. Wası. Endocrine function in thalassaemia M. TALAULICAR, R. EBERT, B. WILLMS and W. CREUTZFELDT. Effect of exogenous insulin on fasting serum levels of gastric inhibitory polypeptide (GIP) in juvenile diabetes 175 C. A. HARDISTY, C. H. TALBOT and D. S. MUNRO. The effect of partial thyroidectomy for Graves' disease on serum long-acting thyroid stimulator 181 protector (LATS-P) MARIA LANGER, A. MASALA, S. ALAGNA, S. RASSU, G. MADEDDU, A. SOLINAS and L. CHIANDUSSI. Growth hormone (GH) secretion in hepatic encephalopathy 189 **Review Article** 193 T. G. Brien. Human corticosteroid binding globulin VOLUME 14, NUMBER 3, MARCH 1981 S. L. LIGHTMAN, V. H. T. JAMES, C. LINSELL, P. E. MULLEN, S. PEART and P. S. SEVER. Studies of diurnal changes in plasma renin activity and plasma noradrenaline, aldosterone and cortisol concentrations in man 213 J. R. JUTTMANN, C. J. BUURMAN, E. DE KAM, T. J. VISSER and J. C. BIRKENHÄGER. Serum concentrations of metabolites of vitamin D in patients with chronic renal failure (CRF). Consequences for the treatment with 1-α-hydroxyderivatives 225 P. F. A. VAN LOOK and MARIJKE FRÖLICH. Effects of ethinyloestradiol on plasma levels of pituitary gonadotrophins, testicular steroids and sex hormone binding globulin in normal men 237 MARY G. METCALF, R. A. DONALD and J. H. LIVESEY. Pituitary-ovarian function in normal women during the menopausal transition 245 M. R. GLASS, B. T. RUDD, S. S. LYNCH and W. R. BUTT. Oestrogen-gonadotrophin feedback mechanisms in the puerperium 257 G. M. WARD, A. R. REES, B. A. NAYLOR and R. C. TURNER. The relationship of erythrocyte insulin receptors to red cell age and to monocyte insulin receptors 269 R. R. HOLMAN and R. C. TURNER. The basal plasma glucose: a simple relevant index of maturity-onset diabetes 279 J. BLANKSTEIN, F. I. REYES, J. S. D. WINTER and C. FAIMAN. Endorphins and the regulation of the human menstrual cycle 287 C. BECKERS, C. CORNETTE, A. GEORGOULIS, A. SOUVATZOGLOU, J. SFONTOURIS and

403

D. A. KOUTRAS. The effects of mild iodine deficiency on neonatal thyroid function 295 A. A. R. Gossage, P. G. H. Byfield, Susan Copping and R. L. Himsworth. A comparative study of the binding of Graves' immunoglobulins by the patient's own and other thyroid membranes 301 C. A. SKLAR, S. L. KAPLAN and M. M. GRUMBACH. Lack of effect of oestrogens on adrenal androgen secretion in children and adolescents with a comment on oestrogens and pubic hair growth 311 320 Announcement **Rapid Communication** P. J. A. MOULT, A. GROSSMAN, JOAN M. EVANS, LESLEY H. REES and G. M. BESSER. The effect of naloxone on pulsatile gonadotrophin release in normal subjects 321 VOLUME 14, NUMBER 4, APRIL 1981 A. P. van Seters, W. van Aalderen, A. J. Moolenaar, M. C. B. Gorsiro, F. van ROON and E. T. BACKER. Adrenocortical tumour in untreated congenital adrenocortical hyperplasia associated with inadequate ACTH suppressibility 325 R. PELKONEN, B. GRAHNE, E. HIRVONEN, S-L. KARONEN, J. SALMI, M. TIKKANEN and S. Valtonen. Pituitary function in prolactinoma. Effect of surgery and postoperative bromocriptine therapy 335 P. HENNART, J. DELOGNE-DESNOECK, H. Vis and C. ROBYN. Serum levels of prolactin and milk production in women during a lactation period of thirty 349 S. P. WILKINSON, P. G. WHEELER, R. P. JOWETT, I. K. SMITH, J. KEENAN, J. D. H. SLATER and T. WILLIAMS. Factors relating to aldosterone secretion rate, the excretion of aldosterone 18-glucuronide, and the plasma aldosterone concentration in cirrhosis 355 R. H. MARTIN, M. R. GLASS, C. C. CHAPMAN, G. D. WILSON and K. L. WOODS. Suppression by bromocriptine of the serum lactalbumin peak associated with human lactogenesis 363 W. M. WIERSINGA, K. I. LIE and J. L. TOUBER. Thyroid hormones in acute myocardical infarction 367 I. M. SPITZ, Y. HALPERIN, E. ZYLBER-HARAN, S. SHILO, D. LEROITH, Y. LIEL, J. LIVSHIN, N. LAUFER and J. SCHENKER. Prolactin response to metoclopramide and chlorpromazine in primary testicular failure and isolated gonadotrophin deficiency 375 A. GROSSMAN, W. A. STUBBS, R. C. GAILLARD, G. DELITALA, LESLEY H. REES and G. M. Besser. Studies on the opiate control of prolactin, GH and TSH 381 P. J. A. MOULT, JANET E. DACIE, LESLEY H. REES and G. M. BESSER. Prolactin pulsatility in patients with gonadal dysfunction 387 S. BEER, M. TIEDER, D. KOHELET, O. A. LIBERMAN, E. VURE, G. BAR-JOSEPH, D. GABIZON, Z. U. BOROCHOWITZ, M. VARON and D. MODAI. Vitamin D resistant rickets with alopecia: a form of end organ resistance to 1,25-dihydroxy vitamin D 395

J. J. Braun, J. C. Birkenhäger, T. J. Visser and J. R. Juttmann. Lack of response of 1,25-dihydroxycholecalciferol to exogenous parathyroid hormone in a patient

with treated pseudohypoparathyroidism

A. R. GENAZZINI, F. FACCHINETTI and D. PARRINI.  $\beta$ -lipotrophin and  $\beta$ -endorphin plasma levels during pregnancy 409 D. A. WALKER and M. DAVIES. Addison's disease presenting as a hypercalcaemic crisis in a patient with idiopathic hypoparathyroidism 419 Announcements 424 VOLUME 14, NUMBER 5, MAY 1981 B. M. Frier, R. J. M. Corrall, J. G. Ratcliffe, J. P. Ashby and Elizabeth J. W. McClemont. Autonomic neural control mechanisms of substrate and hormonal 425 responses to acute hypoglycaemia in man JOAN ALBIN and R. Wu. Abnormal hypothalamic-pituitary function in polyostotic fibrous dysplasia 435 ULLA RASMUSSEN, H. J. CLEMENTSON, J. V. JØRGENSEN, BIRGITTE GULDHAMMER, CHARLOTTE MOLLERUP and H. KEHLET. Metabolic response to subtotal thyroidectomy in propranolol-treated thyrotoxic patients 445 C. M. FEEK, J. G. RATCLIFFE, J. SETH, C. E. GRAY, A. D. TOFT and W. J. IRVINE. Patterns of plasma cortisol and ACTH concentrations in patients with Addison's 451 disease treated with conventional corticosteroid replacement P. Mauvais-Jarvis, F. Kuttenn, Irène Mowszowicz and Françoise Wright. Different aspects of 5α-reductase deficiency in male pseudohermaphroditism and hypothyroidism 459 R. C. GAILLARD, A. GROSSMAN, R. SMITH, LESLEY H. REES and G. M. BESSER. The effects of a met-enkephalin analogue on ACTH, β-LPH, β-endorphin and 479 met-enkephalin in patients with adrenocortical disease G. BLESA-MALPICA, D. G. JOHNSTON, JACKY M. BURRIN, H. ØRSKOV, A. B. HEATH and K. G. M. M. Alberti. Dopaminergic control of ketogenesis in fasting 471 C. G. BEARDWELL, A. R. ADAMSON and S. M. SHALET. Prolonged remission in florid Cushing's syndrome following metyrapone treatment 485 F. C. Wu, P. EDMOND, G. RAAB and W. M. HUNTER. Endocrine assessment of the 493 subfertile male C. A. HARDISTY, LINDA HANFORD and D. S. MUNRO. The prediction of relapse after drug treatment of Graves' disease by assay of long acting thyroid stimulator-509 protector (LATS-P) M. D. C. DONALDSON, D. B. GRANT, M. J. O'HARE and C. H. L. SHACKLETON. Familial congenital Cushing's syndrome due to bilateral nodular adrenal hyperplasia 519 D. J. HANDELSMAN, V. L. RALEC, D. J. TILLER, J. S. HORVATH and J. R. TURTLE. Testicular function after renal transplantation 527 VOLUME 14, NUMBER 6, JUNE 1981 T. H. JURNEY, H. DE RUYTER and R. A. VIGERSKY. Cushings's disease presenting as amenorrhoea with hyperprolactinaemia: report of two cases 539 J. Sólyom. Blood-spot 17α-hydroxyprogesterone radioimmunoassay in the follow-up of congenital adrenal hyperplasia 547 P. A. Dahlberg, F. A. Karlsson, B. Lindström and L. Wide. Studies of thyroid hormone and methimazole levels in patients with Graves' disease on a standardized anti-thyroid drug regimen 555

Contents	vii
	563
71 1	571
F. A. KARLSSON and P. A. DAHLBERG. Thyroid stimulating antibodies (TSAb) in patients with Graves' disease undergoing antithyroid drug treatment: indicators of activity of disease	579
E. C. Burns, J. M. Tanner, M. A. Preece and N. Cameron. Growth hormone	587
J. FEELY, J. CROOKS, A. L. FORREST, W. F. D. HAMILTON, A. GUNN and MARGARET C. K. Browning. Altered endocrine response to partial thyroidectomy in	505
propranolol-prepared hyperthryoid patients R. J. Anderson, E. G. Lufkin, G. W. Sizemore, J. A. Carney, S. G. Sheps and Y. E. Silliman. Acromegaly and pituitary adenoma with phaeochromocytoma:	597
	605
change in body posture on plasma and serum electrolytes in normal subjects and	613
	621
71.0	625
C. A. HARDISTY, LINDA HANFORD, HAZEL HUMPHRIES and D. S. MUNRO. Long-acting thyroid stimulator (LATS) and long acting thyroid stimulator protector (LATS-P) in untreated thyrotoxicosis	63

Author index to Volume 14
Subject index to Volume 14